RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: _10/540,959_
Source: _PCT_
Date Processed by STIC: _7-12-05_

ENTERED

PCT

RAW SEQUENCE LISTING   DATE: 07/12/2005
PATENT APPLICATION: US/10/540,959   TIME: 10:04:22

Input Set : **D:\A184seq.txt**
Output Set: **N:\CRF4\07122005\J540959.raw**

```
 4 <110> APPLICANT: BIOGEN IDEC MA INC.
 5       RENNERT, Paul
 7 <120> TITLE OF INVENTION: KIM-1 Antagonists and Use to Modulate
 8       Immune System
10 <130> FILE REFERENCE: A184 PCT
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C--> **12 <140> CURRENT APPLICATION NUMBER: US/10/540,959**
C--> **13 <141> CURRENT FILING DATE: 2005-06-28**
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15 <150> PRIOR APPLICATION NUMBER: 60/436934
16 <151> PRIOR FILING DATE: 2002-12-30
18 <160> NUMBER OF SEQ ID NOS: 5
20 <170> SOFTWARE: FastSEQ for Windows Version 4.0
22 <210> SEQ ID NO: 1
23 <211> LENGTH: 518
24 <212> TYPE: PRT
25 <213> ORGANISM: Artificial Sequence
27 <220> FEATURE:
28 <223> OTHER INFORMATION: Human KIM-1 Extracellular Domain Fc Construct
30 <400> SEQUENCE: 1
31 Met His Pro Gln Val Val Ile Leu Ser Leu Ile Leu His Leu Ala Asp
32 1               5                   10                  15
33 Ser Val Ala Gly Ser Val Lys Val Gly Gly Glu Ala Gly Pro Ser Val
34             20                  25                  30
35 Thr Leu Pro Cys His Tyr Ser Gly Ala Val Thr Ser Met Cys Trp Asn
36         35                  40                  45
37 Arg Gly Ser Cys Ser Leu Phe Thr Cys Gln Asn Gly Ile Val Trp Thr
38     50                  55                  60
39 Asn Gly Thr His Val Thr Tyr Arg Lys Asp Thr Arg Tyr Lys Leu Leu
40 65                  70                  75                  80
41 Gly Asp Leu Ser Arg Arg Asp Val Ser Leu Thr Ile Glu Asn Thr Ala
42             85                  90                  95
43 Val Ser Asp Ser Gly Val Tyr Cys Cys Arg Val Glu His Arg Gly Trp
44             100                 105                 110
45 Phe Asn Asp Met Lys Ile Thr Val Ser Leu Glu Ile Val Pro Pro Lys
46         115                 120                 125
47 Val Thr Thr Thr Pro Ile Val Thr Thr Val Pro Thr Val Thr Thr Val
48     130                 135                 140
49 Arg Thr Ser Thr Thr Val Pro Thr Thr Thr Thr Val Pro Thr Thr Thr
50 145                 150                 155                 160
51 Val Pro Thr Thr Met Ser Ile Pro Thr Thr Thr Val Pro Thr Thr
52             165                 170                 175
53 Met Thr Val Ser Thr Thr Thr Ser Val Pro Thr Thr Thr Ser Ile Pro
54             180                 185                 190
55 Thr Thr Thr Ser Val Pro Val Thr Thr Thr Val Ser Thr Phe Val Pro
```

```
56          195                 200                 205
57 Pro Met Pro Leu Pro Arg Gln Asn His Glu Pro Val Ala Thr Ser Pro
58      210                 215                 220
59 Ser Ser Pro Gln Pro Ala Glu Thr His Pro Thr Thr Leu Gln Gly Ala
60 225                 230                 235                 240
61 Ile Arg Arg Glu Pro Thr Ser Ser Pro Leu Tyr Ser Tyr Thr Thr Asp
62                  245                 250                 255
63 Gly Asn Asp Thr Val Thr Glu Ser Ser Asp Gly Leu Trp Asn Asn Asn
64                  260                 265                 270
65 Gln Thr Gln Leu Phe Leu Glu His Ser Leu Leu Thr Ala Asn Thr Thr
66      275                 280                 285
67 Lys Gly Val Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu
68      290                 295                 300
69 Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp
70 305                 310                 315                 320
71 Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp
72                  325                 330                 335
73 Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly
74                  340                 345                 350
75 Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn
76      355                 360                 365
77 Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp
78      370                 375                 380
79 Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro
80 385                 390                 395                 400
81 Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu
82                  405                 410                 415
83 Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn
84                  420                 425                 430
85 Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile
86      435                 440                 445
87 Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr
88      450                 455                 460
89 Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys
90 465                 470                 475                 480
91 Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys
92                  485                 490                 495
93 Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu
94                  500                 505                 510
95 Ser Leu Ser Pro Gly Lys
96      515
99 <210> SEQ ID NO: 2
100 <211> LENGTH: 357
101 <212> TYPE: PRT
102 <213> ORGANISM: Artificial Sequence
104 <220> FEATURE:
105 <223> OTHER INFORMATION: Human KIM-1 Partial Extracellular Domain Fc
106       Construct
108 <400> SEQUENCE: 2
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Input Set : **D:\A184seq.txt**
Output Set: **N:\CRF4\07122005\J540959.raw**

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109 Met His Pro Gln Val Val Ile Leu Ser Leu Ile Leu His Leu Ala Asp
110 1               5               10              15
111 Ser Val Ala Gly Ser Val Lys Val Gly Gly Glu Ala Gly Pro Ser Val
112         20              25              30
113 Thr Leu Pro Cys His Tyr Ser Gly Ala Val Thr Ser Met Cys Trp Asn
114         35              40              45
115 Arg Gly Ser Cys Ser Leu Phe Thr Cys Gln Asn Gly Ile Val Trp Thr
116     50              55              60
117 Asn Gly Thr His Val Thr Tyr Arg Lys Asp Thr Arg Tyr Lys Leu Leu
118 65              70              75              80
119 Gly Asp Leu Ser Arg Arg Asp Val Ser Leu Thr Ile Glu Asn Thr Ala
120             85              90              95
121 Val Ser Asp Ser Gly Val Tyr Cys Cys Arg Val Glu His Arg Gly Trp
122         100             105             110
123 Phe Asn Asp Met Lys Ile Thr Val Ser Leu Glu Ile Val Pro Pro Lys
124         115             120             125
125 Val Val Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu
126     130             135             140
127 Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr
128 145             150             155             160
129 Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val
130             165             170             175
131 Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val
132             180             185             190
133 Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser
134         195             200             205
135 Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu
136         210             215             220
137 Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala
138 225             230             235             240
139 Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro
140             245             250             255
141 Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln
142         260             265             270
143 Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala
144         275             280             285
145 Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr
146     290             295             300
147 Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu
148 305             310             315             320
149 Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser
150             325             330             335
151 Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser
152             340             345             350
153 Leu Ser Pro Gly Lys
154             355
157 <210> SEQ ID NO: 3
158 <211> LENGTH: 298
159 <212> TYPE: PRT
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RAW SEQUENCE LISTING   DATE: 07/12/2005
PATENT APPLICATION: US/10/540,959   TIME: 10:04:22

Input Set : **D:\A184seq.txt**
Output Set: **N:\CRF4\07122005\J540959.raw**

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160 <213> ORGANISM: Artificial Sequence
162 <220> FEATURE:
163 <223> OTHER INFORMATION: Human KIM-1 Extracellular Domain Histag Construct
165 <400> SEQUENCE: 3
166 Met His Pro Gln Val Val Ile Leu Ser Leu Ile Leu His Leu Ala Asp
167 1               5                  10                  15
168 Ser Val Ala Gly Ser Val Lys Val Gly Gly Glu Ala Gly Pro Ser Val
169             20                  25                  30
170 Thr Leu Pro Cys His Tyr Ser Gly Ala Val Thr Ser Met Cys Trp Asn
171         35                  40                  45
172 Arg Gly Ser Cys Ser Leu Phe Thr Cys Gln Asn Gly Ile Val Trp Thr
173     50                  55                  60
174 Asn Gly Thr His Val Thr Tyr Arg Lys Asp Thr Arg Tyr Lys Leu Leu
175 65                  70                  75                  80
176 Gly Asp Leu Ser Arg Arg Asp Val Ser Leu Thr Ile Glu Asn Thr Ala
177             85                  90                  95
178 Val Ser Asp Ser Gly Val Tyr Cys Cys Arg Val Glu His Arg Gly Trp
179             100                 105                 110
180 Phe Asn Asp Met Lys Ile Thr Val Ser Leu Glu Ile Val Pro Pro Lys
181         115                 120                 125
182 Val Thr Thr Thr Pro Ile Val Thr Thr Val Pro Thr Val Thr Thr Val
183     130                 135                 140
184 Arg Thr Ser Thr Thr Val Pro Thr Thr Thr Val Pro Thr Thr Thr
185 145                 150                 155                 160
186 Val Pro Thr Thr Met Ser Ile Pro Thr Thr Thr Val Pro Thr Thr
187             165                 170                 175
188 Met Thr Val Ser Thr Thr Thr Ser Val Pro Thr Thr Thr Ser Ile Pro
189             180                 185                 190
190 Thr Thr Thr Ser Val Pro Val Thr Thr Thr Val Ser Thr Phe Val Pro
191         195                 200                 205
192 Pro Met Pro Leu Pro Arg Gln Asn His Glu Pro Val Ala Thr Ser Pro
193     210                 215                 220
194 Ser Ser Pro Gln Pro Ala Glu Thr His Pro Thr Thr Leu Gln Gly Ala
195 225                 230                 235                 240
196 Ile Arg Arg Glu Pro Thr Ser Ser Pro Leu Tyr Ser Tyr Thr Thr Asp
197             245                 250                 255
198 Gly Asn Asp Thr Val Thr Glu Ser Ser Asp Gly Leu Trp Asn Asn Asn
199             260                 265                 270
200 Gln Thr Gln Leu Phe Leu Glu His Ser Leu Leu Thr Ala Asn Thr Thr
201         275                 280                 285
202 Lys Gly Val Glu His His His His His His
203     290                 295
206 <210> SEQ ID NO: 4
207 <211> LENGTH: 1398
208 <212> TYPE: DNA
209 <213> ORGANISM: Murine
211 <220> FEATURE:
212 <223> OTHER INFORMATION: Human KIM-1 Extracellular Domain Fe Construct Fc
214 <400> SEQUENCE: 4
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Input Set : D:\A184seq.txt
Output Set: N:\CRF4\07122005\J540959.raw

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215 atgaatcaga ttcaagtctt catttcaggc ctcatactgc ttctcccagg cactgtggat 60
216 tcttatgtgg aagtaaaggg ggtagtgggt caccctgtca cacttccatg tacttactca 120
217 acatatcgtg gaatcacaac gacatgttgg ggccgagggc aatgcccatc ttctgcttgt 180
218 caaaatacac ttatttggac caatggacat cgtgtcacct atcagaagag cagtcggtac 240
219 aacttaaagg ggcatatttc agaaggagat gtgtccttga cgatagagaa ctctgttgag 300
220 agtgacagtg gtctgtattg ttgtcgagtg gagattcctg gatggtttaa tgatcagaaa 360
221 gtgacctttt cattgcaagt taaaccagag attcccacac gtcctccaac aagacccaca 420
222 actacaaggc ccacagctac aggaagaccc acgactattt caacaagatc cacacatgta 480
223 ccaacatcaa tcagagtctc tacctccact cctccaacat ctacacacac atggactcac 540
224 aaaccagaac ccactacatt ttgtccccat gagacaacag ctgaggtgac aggaatccca 600
225 tcccatactc ctacagactg gaatggcact gcgacatcct caggagatac ctggagtaat 660
226 cacactgaag caatccctcc agggaagccg cagaaaaacc ctactaaggg cgtcgacaaa 720
227 actcacacat gcccaccgtg cccagcacct gaactcctgg ggggaccgtc agtcttcctc 780
228 ttccccccaa aacccaagga caccctcatg atctcccgga cccctgaggt cacatgcgtg 840
229 gtggtggacg tgagccacga agaccctgag gtcaagttca actggtacgt ggacggcgtg 900
230 gaggtgcata atgccaagac aaagccgcgg gaggagcagt acaacagcac gtaccgtgtg 960
231 gtcagcgtcc tcaccgtcct gcaccaggac tggctgaatg gcaaggagta caagtgcaag 1020
232 gtctccaaca aagccctccc agcccccatc gagaaaacca tctccaaagc caaagggcag 1080
233 ccccgagaac acaggtgta caccctgccc ccatcccggg atgagctgac caagaaccag 1140
234 gtcagcctga cctgcctggt caaaggcttc tatcccagcg acatcgccgt ggagtgggag 1200
235 agcaatgggc agccggagaa caactacaag accacgcctc ccgtgttgga ctccgacggc 1260
236 tccttcttcc tctacagcaa gctcaccgtg gacaagagca ggtggcagca ggggaacgtc 1320
237 ttctcatgct ccgtgatgca tgaggctctg cacaaccact acacgcagaa gagcctctcc 1380
238 ctgtctcccg ggaaatga                                            1398
240 <210> SEQ ID NO: 5
241 <211> LENGTH: 465
242 <212> TYPE: PRT
243 <213> ORGANISM: Artificial Sequence
245 <220> FEATURE:
246 <223> OTHER INFORMATION: KIM-1 Fc Fusion
248 <400> SEQUENCE: 5
249 Met Asn Gln Ile Gln Val Phe Ile Ser Gly Leu Ile Leu Leu Leu Pro
250  1               5                  10                  15
251 Gly Thr Val Asp Ser Tyr Val Glu Val Lys Gly Val Val Gly His Pro
252            20                  25                  30
253 Val Thr Leu Pro Cys Thr Tyr Ser Thr Tyr Arg Gly Ile Thr Thr Thr
254            35                  40                  45
255 Cys Trp Gly Arg Gly Gln Cys Pro Ser Ser Ala Cys Gln Asn Thr Leu
256        50                  55                  60
257 Ile Trp Thr Asn Gly His Arg Val Thr Tyr Gln Lys Ser Ser Arg Tyr
258 65                  70                  75                  80
259 Asn Leu Lys Gly His Ile Ser Glu Gly Asp Val Ser Leu Thr Ile Glu
260                85                  90                  95
261 Asn Ser Val Glu Ser Asp Ser Gly Leu Tyr Cys Cys Arg Val Glu Ile
262            100                 105                 110
263 Pro Gly Trp Phe Asn Asp Gln Lys Val Thr Phe Ser Leu Gln Val Lys
264            115                 120                 125
265 Pro Glu Ile Pro Thr Arg Pro Pro Thr Arg Pro Thr Thr Thr Arg Pro
266        130                 135                 140
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VERIFICATION SUMMARY DATE: 07/12/2005
PATENT APPLICATION: **US/10/540,959** TIME: 10:04:23

Input Set : **D:\A184seq.txt**
Output Set: **N:\CRF4\07122005\J540959.raw**

L:12 M:270 C: Current Application Number differs, Replaced Current Application Number
L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date